ABSTRACT OF THE DISCLOSURE

The method includes receiving a signal to insert a data effect into a digitally encoded, framed data stream, retrieving a data effect having the same format as that of the data stream, detecting a first data stream frame boundary, inserting the data effect into the data stream

5   at the first data stream frame boundary, detecting a second data stream frame boundary, and resuming the data stream at the second data stream frame boundary. If the data stream can be of more than one format, the format of the data stream can first be determined. The apparatus includes a processor and a multiplexor. The multiplexor is used for inserting the data effect into the data stream. The processor is used for detecting data stream frame boundaries, retrieving

10   from a memory a data effect having the format of the data stream, and transmitting the formatted data effect to the multiplexor. The data stream may be an audio stream formatted in MPEG format (including MPEG-1, MPEG-2, MP3, MPEG-4), AC-3 format (including 2-channel, 5.1-channel, and 7.1-channel), or DTS format. The data effects may be stored in a plurality of formats. Synchronization between the video and audio streams is maintained by dropping

15   frames that are replaced by the data effect. Another method generates a video signal by retrieving a video effect corresponding to an audio effect, inserting the video effect into a video stream associated with an audio stream, and resuming the video stream and audio stream.